

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-16 are presently active, Claims 3 and 12 have been presently amended, and Claims 15-16 have been presently added.

In the outstanding Office Action, Claims 1-4, 8-12, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsubone et al. (Japan Publication No. 10-313041, hereinafter “Tsubone”); Claims 5-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsubone in view of Uryu et al. (Japan Application No. 09064144, hereinafter “Uryu”); and Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsubone in view of Dessert (French Patent Publication No. 267711A).

Claims 3 and 12 are amended to more particularly define the present invention. The amendments to Claims 3 and 12 are supported by the original disclosure of this application, see, for example, page 14, line 25 to page 15, line 18, and page 17, lines 7 to 12, along with the corresponding figures. New Claims 15 and 16 are supported by the original disclosure of this application, see, for example, page 14, line 25 to page 15, line 18, page 16, lines 2 to 9, page 17, lines 7 to 12, and page 18, line 20 to page 19, line 13, along with the corresponding figures. No new matter has been added.

Applicants respectfully traverse the 35 U.S.C. § 103(a) rejection based on Tsubone for the reasons that follow.

Claim 1 is directed to a treatment subject receiving vessel body. Claim 1 recites, in part, a treatment subject vessel receiving body that includes “an openable and closable exhaust port *disposed in the vessel main body* to exhaust the vessel main body.” An exemplary embodiment of the exhaust port is reference numeral 108, shown in Figure 2. The exhaust port is directly connected to the interior of the vessel main body, and *not through the*

gate valve. Thus, the interior of the vessel main body can be pumped directly through the openable and closable exhaust port even when the gate valve is closed and the interior of the vessel main body is separated from a joint port formed at one side surface of the vessel main body, as described at page 17, lines 13-20 of the specification.

Tsubone describes that “specimens can be continuously processed at a vacuum state throughout processes, or during a part of the processes, while avoiding a cross contamination in vacuum chambers” and that maintainability can be enhanced by providing processing modules separately.¹ Tsubone also describes that a load-unload device (1) is provided with the same structure as that of a processing module (3).²

The Office Action, in section 1 on page 3, concedes that “Tsubone et al. fail to disclose an openable and closeable exhaust port disposed in the vessel main body.” However, the Office Action, takes the position that, because Tsubone describes that by providing individual structures of the apparatus with individual atmosphere control means (i.e. exhaust means and inert gas source means) cross-contamination can be prevented and therefore the maintainability of the structures is enhanced, “[i]t would have been obvious to one of person of ordinary skill in the art at the time the invention was made to have provided individual atmosphere control means for each of the structures of the apparatus in order to prevent cross contamination and therefore therefore [*sic*] the maintainability of the structures is enhanced as taught by Tsubone et al.”³

However, it is respectfully submitted that Tsubone does not disclose or suggest “an openable and closable exhaust port disposed in the vessel main body to exhaust the vessel main body,” as recited in Claim 1.

Instead, the exhaust valve (13) described in Tsubone is ***not disposed*** in the moving vacuum chamber (4). On the contrary, the exhaust valve (13) described in Tsubone is located

¹ See the English translation of Tsubone, at paragraph [0015].

² See the English translation of Tsubone, at paragraph [0013].

³ See the Office Action, at numbered paragraphs 2 and 3, on page 3.

in the load-lock chamber (6b) ***outside the gate valve (5a)***. Therefore, Tsubone describes that the interior of the moving vacuum chamber (4) can be pumped only when the gate valve (5a) is opened through the exhaust valve (13).

Additionally, Tsubone describes that cross contamination is prevented and maintainability of the structures is enhanced ***because the processing modules (3) are provided separately from the load/unload device (1)***, and does not suggest that each individual moving vacuum chamber (4) should have its own individual atmosphere control means. Further, Tsubone does not suggest or even recognize that pumping the moving vacuum chamber (4) when the gate valve (5a) is closed reduces cross contamination and enhances maintainability of the structures.

Thus, it is respectfully submitted that Tsubone does not suggest the desirability of adding an exhaust valve (13) to the moving vacuum chamber (4). As stated in M.P.E.P §2143.01(III), “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.”

Consequently, Tsubone does not disclose or suggest each and every element as set forth in the Claim 1. Hence, Claim 1 is not rendered obvious by Tsubone and is believed to patentably define over Tsubone.

Additionally, the dependent claims are allowable for at least the same reasons discussed above with respect to Claim 1 from which they depend. It is respectfully submitted that the dependent claims also recite features not disclosed or suggested by the cited references, as discussed below.

Claim 2 recites, in part, that “the vessel main body includes an exhaust opening.” As discussed above, the exhaust valve (13) described in Tsubone is not disposed in the vessel

main body (4). Therefore, it is respectfully submitted that Claim 2 is not rendered obvious by Tsubone and is believed to patentably define over Tsubone.

Claim 3 recites, in part, “a first transport auxiliary chamber...having therein a gas exhaust line for vacuum pumping an inner atmosphere of the first transport auxiliary chamber” and “a second transport auxiliary chamber...having therein a gas exhaust line for vacuum pumping an inner atmosphere of the second transport auxiliary chamber.” Thus, the first and the second auxiliary chambers can be exhausted *independently and directly* by the respective gas exhaust lines therein, and do not have to be exhausted via a processing chamber, for example.

In the apparatus described in Tsubone, the first and second transport auxiliary chambers (7 adjacent 3a and 7 adjacent 3b, respectively) *do not have gas exhaust lines therein* for vacuum pumping the inner atmospheres of the first and the second transport auxiliary chambers.⁴ Therefore, in the apparatus described in Tsubone, the atmospheres of the first and the second transport auxiliary chamber only can be exhausted *indirectly* via a processing chamber (one of 3a to 3c), or the load-lock chamber (6b). Therefore, it is respectfully submitted that Claim 3 is not rendered obvious by Tsubone and is believed to patentably define over Tsubone.

With regard to the rejection of Claims 5-7 as unpatentable over Tsubone in view of Uryu, it is noted that Claims 5-7 are dependent from Claim 1, and thus are believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Uryu does not cure the above-noted deficiencies of Tsubone. Additionally, it is respectfully submitted that Claims 5-7 also recite features not disclosed or suggested by the cited references, as discussed below.

⁴ See the English translation of Tsubone, at paragraphs [0012] and [0013], along with Figure 2.

Claims 5 and 6 each recite, in part, that “a pair of buffer mounting tables are ***installed in the first transport auxiliary chamber*** for temporarily mounting thereon the treatment subject.” Thus, an unprocessed wafer can be mounted on one of the buffer mounting tables near a common transfer chamber and a processed wafer can be mounted on the other remaining buffer mounting table on the opposite side so that an efficient transfer of the wafers can be carried out.⁵

The Office Action takes the position that the item attached to the specimen mounting device (10) shown in Figure 2 of Tsubone equates to the claimed “pair of buffer mounting tables.” However, it is respectfully submitted that the item attached to the specimen mounting device (10) is not a mounting table for temporarily mounting thereon the treatment subject. The item attached to the specimen mounting table (10) shown in Tsubone is ***not installed*** in a vacuum holding buffer chamber (7), which the Office Action equates to the claimed transport auxiliary tables. Instead, Figure 2 of Tsubone shows that the item attached to the specimen mounting table (10) is installed in the moving vacuum chamber (4). Therefore, the vacuum holding buffer chamber (7) ***does not*** have therein the pair of buffer mounting tables. Thus, the efficient transfer of the wafers provided by the claimed treating system cannot be obtained by the device described in Tsubone.

Thus, it is respectfully submitted that neither Tsubone nor Uryu disclose or suggest the above emphasized pair of buffer mounting tables, as recited in Claims 5 and 6. Assuming *arguendo* that Tsubone nor Uryu could be combined in a reasonable manner, the combination nevertheless fails to teach or suggest every element of Claims 5 and 6. Accordingly, it is respectfully submitted that Claims 5 and 6, and Claim 7 which depends from Claim 6, are patentable over Tsubone in view of Uryu.

⁵ See the original specification, for example, at page 13, line 17 to page 14, line 24.

With regard to the rejection of Claim 13 as unpatentable over Tsubone in view of Dessert, it is noted that Claim 13 is dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Dessert does not cure the above-noted deficiencies of Tsubone.

M.P.E.P. §2141.01(a) states:

In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.

The invention recited in Claim 13 relates to a treatment subject receiving vessel body for accommodating and transferring a treatment subject, for example, a semiconductor wafer or the like in a sealed state. However, Dessert relates to a portable recharging unit for a domestic refrigeration system. Therefore, the field of the invention recited in Claim 13 is different from that of Dessert.

Furthermore, the particular problem the invention recited in Claim 13 was designed to solve is how to rotate a vacuum pump when the vessel main body is separated from a vessel platform and then individually transported. However, the particular problem of Dessert is how to avoid an expensive return to a base workshop. Therefore, the problem of Dessert is not pertinent to that of Claim 13.

Thus, it is respectfully submitted that Dessert is non-analogous art, and should not be relied on to reject Claim 13 under 35 U.S.C. §103(a). Additionally, even assuming Tsubone and Dessert are properly combinable, it is respectfully submitted that the cited combination does not disclose or suggest every feature recited in Claim 13. Thus, it is respectfully requested that the rejection of Claim 13 be withdrawn, and that Claim 13 be allowed in its present form.


New Claims 15 and 16 are supported by the original disclosure of this application, see, for example, page 14, line 25 to page 15, line 18, page 16, lines 2 to 9, page 17, lines 7 to 12, and page 18, line 20 to page 19, line 13, along with the corresponding figures. No new matter has been added. Additionally, it is noted that new Claims 15 and 16 are dependent from Claim 1. Therefore, it is respectfully submitted that new Claims 15 and 16 patentably define over the cited references for at least the reasons discussed above with respect to Claim 1.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance for claims 1-16 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

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